

**MULTIPLY ω -LOCAL FORMATIONS
AND FITTING CLASSES OF FINITE GROUPS***A. N. Skiba and L. A. Shemetkov*

The present article deals only with finite groups. Functions of the form

$$f: \omega \cup \{\omega'\} \rightarrow \{\text{group formations}\}$$

are called ω -local satellites (here ω denotes a nonempty set of primes). Functions of this form are used to study the structure of the ω -local formations, i.e. the formations \mathfrak{F} such that $G \in \mathfrak{F}$ whenever $G/\Phi(G) \cap O_\omega(G) \in \mathfrak{F}$. The theory of ω -local Fitting classes is analyzed which is dual to the theory of ω -local formations.

Key words and phrases: formation, Fitting class, n -multiply ω -local formation, n -multiply ω -local Fitting class, lattice of formations, product of formations, product of Fitting classes, maximal subformation.

Skiba Aleksandr Nikolaevich

Received

Shemetkov Leonid Aleksandrovich

November 19, 1997

Gomel Fr. Scorina State University,
246699 Gomel, Belarus.

E-mail: skiba@gsu.unibel.by

E-mail: shemetkov@gsu.unibel.by

Translated into English:

Siberian Advances in Mathematics, V. 10, N 2, 112–141 (2000).